

EMPLOYMENT

Research Informatician – Intern	AstraZeneca – Boston	Summer 2012
Data Radar – Developed an informatics solution for enterprise-wide biomarker metadata management (MySQL, PHP).		
Software Engineer – Developer	IBM India Pvt. Ltd.	Sprint 2009 – Spring 2011
IBM Tivoli Monitoring for Energy Management – Reporting and Optimization (Java, J2EE, JSP, SQL, Javascript)		
<ul style="list-style-type: none">Designed and implemented the installer, data collector and reporting modules of the software.Designed data models for the Green IT energy metrics of servers and facility devices in a data center.		
Visual data exploration of data center energy data (Java, SQL)		
<ul style="list-style-type: none">Implemented a proof of concept software for innovative visualization of data center energy metrics.		

RESEARCH PROJECTS

Identification of positive adaptation in human through gene conversion (Spring 2012)		
<ul style="list-style-type: none">Designed algorithms and implemented Python scripts to identify gene conversion patterns in genomic data which includes whole genome assemblies, annotated gene and translated protein sequences.		
Database analysis of protein structural classes (Fall 2008, Spring 2007)		
<ul style="list-style-type: none">Developed Java programs to analyze Protein Data Bank (PDB) X-Ray crystallography and NMR data to infer the role of different amino acids on the structure of proteins through differential investigation of protein structural classes.		
Protein-protein interaction prediction using structure and sequence data (Summer 2008)		
<ul style="list-style-type: none">Designed a two-step algorithm using support vector machines and developed a web-server using J2EE/JSP for predicting interacting residue pairs in protein-protein interaction based on sequence and structural data.		

EDUCATION

Bloomington, IN	Indiana University	Fall 2011 – Present
<ul style="list-style-type: none">M.S. in Bioinformatics, May 2013 (expected). GPA: 3.8 (current)Graduate Coursework: Genome Biology for Physical Scientists; Introduction to Bioinformatics; Fundamental Computer Concepts for Informatics; Evolution of Proteins and Cells; Machine Learning for Bioinformatics.		
Pilani, India	Birla Institute of Technology and Science	Fall 2004 – Spring 2009
<ul style="list-style-type: none">M.Sc. (Hons.) in Biological Sciences and B.E. (Hons.) in Computer Science, August 2009. GPA: 7.86/10Biological Sciences Coursework: Biophysics; Biomolecular Modeling; Cell Biology; Genetics; Developmental BiologyComputer Science Coursework: Theory of Computation; Operating Systems; Database Systems; Data Structures and Algorithms; Compilers; Advanced Computer Organization; Computer Networks; Computer Graphics; Object Oriented Programming; Image Processing.		

PUBLICATIONS

- Wazim M. and S. Chowdhury, "Preference of amino acids in different protein structural classes: A database analysis", 4th Intl. Conf. on Bioinformatics & Biomedical Engineering (iCBBE 2010); IEEE Xplore

TERM PROJECTS

- Keyminer** (Fall 2011). Genomic context analyzer for antibiotic resistance genes in human pathogenic bacteria. Python
- Compiler** (Spring 2008). Building a compiler for a given language with pre-defined syntax and semantics tree. C
- Version Tracker** (Fall 2007). A version tracking system for text files as in text editors. C

AWARDS AND HONORS

- Best of IBM – Bravo Award 2010:** Awarded for immense dedication and contribution towards resolving critical issues in Reporting and Optimization component, out of 6 members in the team.
- Summer Research Fellowship 2008:** Awarded by Indian Academy of Sciences for successful completion of research project at the Institute of Microbial Technology.

LANGUAGES AND TECHNOLOGIES

- C; Java, J2EE; Python; SQL; JavaScript; XML (XSD) Schema; HTML; JSP; Perl; PHP; Dojo; ActionScript
- Eclipse; Rational Application Developer; Cognos BI Server; IBM DB2; MySQL; Websphere Portal Server; Oracle; Flash